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MORBIDITY AND MORTALITY WEEKLY REPORT

National Drunk and Drugged Driving Prevention Month — December 1992

Persons who drive while impaired by alcohol or other drugs are a public health hazard to themselves and to others. Accordingly, the injuries, disabilities, and deaths associated with impaired driving are a major preventable public health problem.

December has been designated National Drunk and Drugged Driving Prevention Month by a nationwide public/private sector coalition devoted to preventing impaired driving crashes. The theme of this year's campaign is "Let's Take a Stand. Friends Don't Let Friends Drive Drunk." Additional information about National Drunk and Drugged Driving Prevention Month is available from Elizabeth Hendricks, Office of Alcohol and State Programs (NTS-22), National Highway Traffic Safety Administration, 400 7th Street, SW, Washington, DC 20590; telephone (202) 366-6976.

Current Trends

Factors Potentially Associated with Reductions in Alcohol-Related Traffic Fatalities — United States, 1990 and 1991

Traffic crashes are the single greatest cause of death among persons aged 5–32 years in the United States (*1*); almost half of all traffic fatalities are alcohol-related (*1,2*). An estimated 40% of persons in the United States may be involved in an alcohol-related traffic crash sometime during their lives (*1*). In 1991, the number of alcohol-related traffic fatalities (ARTFs) declined almost 10% when compared with 1990 (*3*), and the total number of deaths during 1991 (19,900) is the lowest since more complete alcohol-related fatal crash data became available in 1982. This report summarizes data from the National Highway Traffic Safety Administration's (NHTSA) Fatal

Alcohol-Related Traffic Fatalities — Continued

Accident Reporting System on trends in ARTFs in the United States from 1982 through 1991 and presents information regarding several factors potentially related to the decline in fatalities during 1991.

A fatal traffic crash is considered alcohol-related by NHTSA if either a driver or nonoccupant (e.g., a pedestrian) had a blood alcohol concentration (BAC) ≥0.01 g/dL in a police-reported traffic crash. NHTSA defines a BAC ≥0.01 g/dL but <0.10 g/dL as indicating a low level of alcohol and a BAC ≥0.10 g/dL (the legal level of intoxication in most states) as indicating intoxication. Because BACs are not available for all persons involved in fatal crashes, NHTSA estimates the number of ARTFs based on a discriminant analysis of information from all cases for which driver or nonoccupant BAC data are available (*4*). In this report, "alcohol-involved" refers to drivers or nonoccupants with a BAC ≥0.01 g/dL. Data on alcohol-involved drivers refer only to drivers involved in fatal crashes.

From 1990 through 1991, the number of ARTFs decreased 9.9% and nonalcohol-related fatalities decreased 4.2% (Table 1). From 1982 through 1991, the proportion of ARTFs has decreased steadily from 57.3% to 48.0%.

To better understand the decrease in the number of ARTFs from 1990 through 1991, driver age, time of day, and crash location were investigated. Alcohol- and nonalcohol-related fatalities declined among all age groups; however, the decline in alcohol- and nonalcohol-related fatalities was greatest in the 15–20-year age group (12.7% and 6.0%, respectively) (Table 2). From 1990 through 1991, declines in ARTFs were greater during daylight hours (i.e., 6:00 a.m.–7:59 p.m.) than at night (11.7% and 9.1%, respectively) and were greater on urban roads* than on rural roads (12.9% and 7.8%, respectively).

From 1990 through 1991, the estimated number of alcohol-involved drivers in fatal crashes decreased 10.7%, and the estimated number of nonalcohol-involved drivers in fatal crashes decreased 6.4% (Table 1). From 1982 through 1991, the proportion of alcohol-involved drivers in fatal crashes declined from 38.9% to 31.1% (Table 1).

From 1990 through 1991, decreases in the numbers of alcohol-involved drivers compared with nonalcohol-involved drivers were greatest for persons aged 15–20 years (14.6% and 6.9%, respectively); among drivers involved in fatal crashes during the daytime (12.7% and 5.8%, respectively); and among drivers involved in fatal crashes on urban roads (14.1% and 7.4%, respectively) (Table 3).

To further characterize the decline in alcohol-involved fatal crashes during the daytime, data were analyzed by low (i.e., 0.01 g/dL≤BAC≤0.09 g/dL) and high (i.e., BAC ≥0.10 g/dL) BACs. From 1990 through 1991, the decrease in ARTFs and alcohol-involved drivers in fatal crashes during the daytime was substantial among drivers with low BACs. The number of fatalities among drivers with low BACs decreased 16.7% during daytime hours compared with 6.4% at night. Similarly, the number of alcohol-involved drivers with low BACs declined 15.3% during daytime hours compared with 7.6% at night. The number of all drivers with high BACs decreased 10.7% from 1990 through 1991.

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*Based on information from the Federal Highway Administration. Urban versus rural roadway classes are based on boundaries used for federal aid highway programs. A roadway is considered urban if it is in a boundary area of 5000 persons or more.

TABLE 1. Estimated number and percentage of total traffic fatalities i
involved in fatal crashes, by blood alcohol concentration (BAC)[§] — U

		Fatalities			
	Total	BAC=0.00 g/dL		BAC ≥0.01 g/dL	
Year	fatalities	No.	(%)	No.	(%)
1982	43,945	18,780	(42.7)	25,165	(57.3)
1983	42,589	18,943	(44.5)	23,646	(55.5)
1984	44,257	20,499	(46.3)	23,758	(53.7)
1985	43,825	21,109	(48.2)	22,716	(51.8)
1986	46,087	22,042	(47.8)	24,045	(52.2)
1987	46,390	22,749	(49.0)	23,641	(51.0)
1988	47,087	23,461	(49.8)	23,626	(50.2)
1989	45,582	23,178	(50.8)	22,404	(49.2)
1990	44,599	22,515	(50.5)	22,084	(49.5)
1991	41,462	21,563	(52.0)	19,900	(48.0)

[*] Driver or nonoccupant.
[†] Driver(s) may or may not have been killed.
[§] BAC distributions are estimates for drivers and nonoccupants involved in
rounded to the nearest whole number.

Source: Fatal Accident Reporting System, National Highway Traffic Safety A

ties in crashes involving one or more persons* and drivers†
§ — United States, 1982–1991

	Drivers involved				
		BAC=0.00 g/dL		BAC ≥0.01 g/dL	
	Total drivers	No.	(%)	No.	(%)
	56,029	34,250	(61.1)	21,779	(38.9)
	54,656	34,145	(62.5)	20,511	(37.5)
	57,512	36,831	(64.0)	20,681	(36.0)
	57,883	38,321	(66.2)	19,562	(33.8)
	60,335	39,633	(65.7)	20,701	(34.3)
	61,442	41,049	(66.8)	20,393	(33.2)
	62,253	41,813	(67.2)	20,440	(32.8)
	60,435	41,271	(68.3)	19,164	(31.7)
	58,893	39,978	(67.9)	18,915	(32.1)
	54,323	37,424	(68.9)	16,899	(31.1)

ed in fatal crashes. Numbers of fatalities and drivers involved are

fety Administration.

TABLE 2. Estimated changes in the number of traffic fatalities,* by b
day, and crash location[§] — United States, 1990 and 1991

					Fatalitie
	BAC=0.00 g/dL				
	1990		1991		1990–1991
Factor	No.	(%)	No.	(%)	decrease
Age group (yrs)					
0–14	2,169	(75.4)	2,113	(75.9)	2.6%
15–20	3,751	(51.3)	3,525	(53.2)	6.0%
21–44	7,414	(35.4)	7,054	(36.6)	4.9%
≥45	9,126	(68.5)	8,817	(69.7)	3.4%
Time of day					
Day[¶]	17,360	(71.0)	16,688	(72.7)	3.9%
Night**	5,045	(25.5)	4,784	(26.3)	5.2%
Crash location					
Urban	9,373	(49.8)	8,884	(51.9)	5.2%
Rural	13,122	(50.9)	12,643	(52.0)	3.7%

*Fatalities include all occupants and nonoccupants who died within 30 da
[†]BAC distributions are estimates for drivers and nonoccupants involved
nearest whole number.
[§]Based on information from the Federal Highway Administration. Urban
for federal aid highway programs. A roadway is considered urban if it is
[¶]Represents time period from 6:00 a.m. to 7:59 p.m.
**Represents time period from 8:00 p.m. to 5:59 a.m.

Source: Fatal Accident Reporting System, National Highway Traffic Safety A

by blood alcohol concentration (BAC),† driver age, time of

atalities, by BAC					
	BAC ≥0.01 g/dL				
991	1990		1991		1990–1991
ase	No.	(%)	No.	(%)	decrease
%	708	(24.6)	669	(24.0)	5.5%
%	3,557	(48.7)	3,105	(46.8)	12.7%
%	13,546	(64.6)	12,212	(63.4)	9.8%
%	4,202	(31.5)	3,831	(30.3)	8.8%
%	7,102	(29.0)	6,270	(27.3)	11.7%
%	14,731	(74.5)	13,385	(73.7)	9.1%
%	9,434	(50.2)	8,219	(48.1)	12.9%
%	12,638	(49.1)	11,657	(48.0)	7.8%

30 days of a motor-vehicle crash on a public roadway.
olved in fatal crashes. Numbers of fatalities are rounded to the

rban versus rural roadway classes are based on boundaries used
if it is in a boundary area of 5000 persons or more.

fety Administration.

**TABLE 3. Estimated changes in the number of drivers in fata
time of day, and crash location[§] — United States, 1990 and 1**

	BAC=0.00 g/dL			
	1990		1991	
Factor	No.	(%)	No.	(%)
Age group (yrs)[¶]				
15–20	6,220	(68.7)	5,788	(70.5)
21–44	20,143	(60.8)	18,717	(61.7)
≥45	12,901	(83.6)	12,236	(83.8)
Time of day				
Day**	29,179	(83.1)	27,484	(84.2)
Night[††]	10,698	(45.6)	9,840	(46.1)
Crash location				
Urban	18,166	(69.4)	16,821	(71.0)
Rural	21,783	(66.6)	20,547	(67.2)

*Driver(s) may or may not have been killed.
[†]BAC distributions are estimates for drivers and nonoccupants in
whole number.
[§]Based on information from the Federal Highway Administration
for federal aid highway programs. A roadway is considered urb
[¶]The age group 0–14 years has been omitted because persons i
**Represents time period from 6:00 a.m. to 7:59 p.m.
[††]Represents time period from 8:00 p.m. to 5:59 a.m.

Source: Fatal Accident Reporting System, National Highway Traff

n fatal crashes,* by blood alcohol concentration (BAC),† driver age,
and 1991

		Drivers, by BAC				
		BAC ≥0.01 g/dL				
	1990–1991	1990		1991		1990–1991
%)	decrease	No.	(%)	No.	(%)	decrease
0.5)	6.9%	2,832	(31.3)	2,419	(29.5)	14.6%
1.7)	7.1%	12,993	(39.2)	11,627	(38.3)	10.5%
3.8)	5.2%	2,534	(16.4)	2,363	(16.2)	6.7%
4.2)	5.8%	5,930	(16.9)	5,175	(15.8)	12.7%
5.1)	8.0%	12,768	(54.4)	11,511	(53.9)	9.8%
1.0)	7.4%	7,999	(30.6)	6,869	(29.0)	14.1%
7.2)	5.7%	10,908	(33.4)	10,009	(32.8)	8.2%

nts involved in fatal crashes. Numbers of drivers are rounded to the nearest

ration. Urban versus rural roadway classes are based on boundaries used
ed urban if it is in a boundary area of 5000 persons or more.
ons in this age group are usually too young to legally drive.

Traffic Safety Administration.

Alcohol-Related Traffic Fatalities — Continued

Reported by: ME Vegega, PhD, Office of Alcohol and State Programs, Traffic Safety Programs; TM Klein, National Center for Statistics and Analysis, Research and Development, National Highway Traffic Safety Administration. National Center for Injury Prevention and Control, CDC.

Editorial Note: From 1990 through 1991, the decreases in the numbers of ARTFs and alcohol-involved drivers in fatal crashes were the largest annual decreases since 1982. Despite these changes, during 1991, nearly 20,000 ARTFs occurred in the United States, and an estimated 17,000 drivers had detectable BACs at the time of the fatal crash.

Efforts by federal, state, and local government agencies and by private groups are helping to reduce the public health impact of alcohol-impaired driving. Factors that may have contributed to the recent reduction in the numbers of ARTFs and alcohol-involved drivers among persons aged 15–20 years include the enactment of minimum drinking age laws (to age 21 years) and increased enforcement of these laws; increased emphasis on zero tolerance (i.e., laws prohibiting underaged persons from driving with any detectable BAC) and use-lose (i.e., loss of driver's license for use of alcohol by underaged persons) laws for youth; and the implementation of education and prevention activities to prevent underage drinking.

The numbers of ARTFs and alcohol-involved drivers during the daytime declined more rapidly among drivers with low-level BACs than for drivers with high BACs. One potential explanation is that persons with low BACs may be social drinkers who may be more likely to be influenced by general deterrence efforts (e.g., legislation and increased enforcement of existing laws) and publicity about the dangers of drinking and driving.

One national health objective for the year 2000 is to reduce deaths associated with alcohol-related traffic crashes to less than 8.5 per 100,000 persons (objective 4.1) (*5*). The findings in this report, combined with preliminary census data, indicate that the rate of ARTFs has declined from the 1987 baseline of 9.8 per 100,000 persons (*6*) to 7.9 per 100,000 persons in 1991—rates surpassing the year 2000 goal.

NHTSA and CDC are collaborating to continue reducing alcohol-related crashes and alcohol-involved driving. Specific efforts include 1) supporting activities to promote prompt license suspension for persons who drive while intoxicated; 2) supporting expanded use of sobriety checkpoints; 3) developing enforcement policies specific to reducing alcohol-impaired driving among youth; and 4) continuing to educate the public about alcohol-impaired driving (*7*). In addition, NHTSA encourages states to meet the criteria for impaired driving prevention grants designated under the Intermodal Surface Transportation Efficiency Act of 1991.[†] Grant criteria include administratively revoking licenses of persons who drive impaired, lowering the BAC per se limit to 0.08 g/dL, using sobriety checkpoints, implementing programs to prevent drinking among persons under age 21 years, mandatory sentencing of repeat driving-under-the-influence offenders, lowering the BAC limit to 0.02 g/dL for persons under age 21 years, and passing open container laws (i.e., laws prohibiting opened alcohol containers in a motor vehicle).

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Alcohol-Related Traffic Fatalities — Continued

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Heterosexual Transmission of HIV — Puerto Rico, 1981–1991

Puerto Rico has the second highest overall rate of acquired immunodeficiency syndrome (AIDS) cases among states and territories of the United States and the second highest rate of cases among women (*1,2*). Although heterosexual transmission of human immunodeficiency virus (HIV) among persons reported with AIDS has increased throughout the United States—accounting for 8% of all U.S. AIDS cases diagnosed in 1991 (*2,3*)—the proportion of cases attributed to heterosexual transmission is highest in Puerto Rico (18%). This report summarizes data collected through the Puerto Rico AIDS Surveillance Program to characterize AIDS cases associated with heterosexual transmission during 1981–1991.

In Puerto Rico, AIDS case reporting includes the collection of data on behavioral and other risk factors for HIV exposure. A standard report form is completed by trained data abstractors and used to identify HIV-transmission categories. Persons with multiple exposure risks for HIV are assigned a probable mode of transmission using a standard hierarchy (*4*).

From 1981 through 1991, 7080 AIDS cases were reported in Puerto Rico residents aged ≥13 years, including 1266 AIDS cases diagnosed and reported in 1991, for an annual incidence rate of 50.9 cases per 100,000 population. Of the total cases, 5782 (82%) occurred among males.

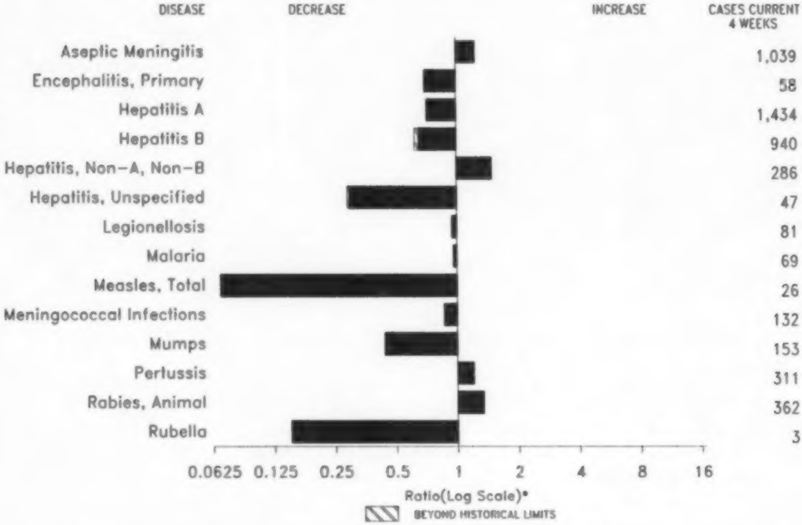
Overall Patterns of Transmission

The primary mode of transmission for HIV in Puerto Rico was injecting-drug use (IDU), which was reported for 4639 (66%) of all cases among adults reported since 1981; 546 (8%) cases among adults were attributed to heterosexual contact with an injecting-drug user. Of all cases among adults, heterosexual transmission accounted for 11% and male-male transmission for 18%.*

*For this report, IDU is considered the primary mode of transmission among the 628 persons reporting both male-male sex and IDU (9% of all AIDS cases among adults in Puerto Rico).

(Continued on page 905)

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending November 28, 1992, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending November 28, 1992 (48th Week)

	Cum. 1992		Cum. 1992
AIDS*	39,229	Measles: imported	128
Anthrax	1	indigenous	2,068
Botulism: Foodborne	18	Plague	12
Infant	51	Poliomyelitis, Paralytic†	-
Other	1	Psittacosis	83
Brucellosis	79	Rabies, human	-
Cholera	97	Syphilis, primary & secondary	31,042
Congenital rubella syndrome	9	Syphilis, congenital, age < 1 year§	1,639
Diphtheria	4	Tetanus	37
Encephalitis, post-infectious	106	Toxic shock syndrome	211
Gonorrhea	446,460	Trichinosis	24
Haemophilus influenzae (invasive disease)	1,173	Tuberculosis	21,109
Hansen Disease	135	Tularemia	149
Leptospirosis	44	Typhoid fever	362
Lyme Disease	7,421	Typhus fever, tickborne (RMSF)	473

*Updated monthly; last update October 31, 1992.
†Four cases of suspected poliomyelitis have been reported in 1992; 6 of the 9 suspected cases with onset in 1991 were confirmed, and 5 of the 8 suspected cases with onset in 1990 were confirmed; all were vaccine associated.
§Reports through second quarter 1992.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending November 28, 1992, and November 30, 1991 (48th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992
UNITED STATES	39,229	10,503	624	106	446,460	555,459	19,081	13,587	5,172	667	1,163	7,421
NEW ENGLAND	1,447	399	27	-	9,416	13,201	545	482	90	24	50	1,562
Maine	44	40	3	-	80	154	29	21	6	-	2	5
N.H.	36	27	3	-	114	183	31	33	20	1	8	36
Vt.	23	24	5	-	25	51	13	13	11	-	2	8
Mass.	722	161	13	-	3,340	5,644	270	385	47	23	25	222
R.I.	84	147	3	-	607	1,119	139	17	6	-	13	287
Conn.	538	-	-	-	5,250	6,050	63	13	-	-	-	1,004
MID. ATLANTIC	10,273	845	24	8	50,279	64,422	1,443	1,764	300	23	301	4,391
Upstate N.Y.	1,304	429	-	-	10,017	11,681	315	436	172	13	99	2,754
N.Y. City	6,024	151	5	2	17,594	24,880	657	351	5	-	8	23
N.J.	1,805	-	-	-	6,978	10,333	232	455	92	-	39	609
Pa.	1,140	265	19	6	15,690	17,528	239	522	31	10	155	1,005
E.N. CENTRAL	3,477	1,778	153	29	85,427	105,361	2,518	1,598	680	23	309	134
Ohio	659	457	52	2	25,668	31,980	407	218	84	4	147	60
Ind.	342	217	10	12	8,380	10,429	722	187	25	2	29	20
Ill.	1,662	508	66	6	28,543	31,052	567	286	90	6	28	27
Mich.	623	548	22	9	19,212	25,084	136	533	409	11	67	27
Wis.	191	48	3	-	3,644	6,816	686	374	72	-	38	-
W.N. CENTRAL	1,110	561	40	6	22,879	27,431	2,569	630	275	34	73	338
Minn.	188	88	17	-	2,751	2,886	707	71	20	2	6	173
Iowa	78	92	-	3	1,434	1,793	53	33	7	5	18	30
Mo.	613	238	8	-	14,091	16,354	1,128	423	214	25	27	101
N. Dak.	8	1	3	-	59	78	112	3	4	1	2	1
S. Dak.	8	10	3	1	161	332	203	5	-	-	-	1
Nebr.	52	31	4	2	8	1,592	239	39	16	1	15	15
Kans.	163	101	5	-	4,375	4,396	127	56	14	-	5	17
S. ATLANTIC	8,687	1,617	163	49	131,644	163,616	1,257	2,306	856	118	178	602
Del.	112	52	6	-	1,625	2,679	52	196	177	1	23	199
Md.	1,115	205	16	-	14,993	18,473	227	363	33	10	36	157
D.C.	621	28	1	-	6,143	8,427	14	78	278	-	16	2
Va.	541	274	36	13	14,048	16,938	140	172	35	47	19	109
W. Va.	44	40	74	-	776	1,188	9	48	3	28	-	12
N.C.	590	188	25	-	22,574	32,159	103	381	81	-	35	69
S.C.	259	26	-	-	10,027	13,144	22	49	1	1	16	2
Ga.	1,144	196	2	-	35,742	37,880	187	267	110	-	9	21
Fla.	4,261	608	3	36	25,716	32,728	503	752	138	33	24	31
E.S. CENTRAL	1,204	514	25	-	45,512	56,675	329	1,209	1,227	2	56	68
Ky.	187	181	14	-	4,379	5,514	122	88	6	-	26	26
Tenn.	386	131	6	-	14,504	19,037	119	997	1,204	-	24	33
Ala.	416	127	4	-	15,821	18,896	48	120	16	1	6	9
Miss.	215	75	1	-	10,808	13,228	40	4	1	1	-	-
W.S. CENTRAL	3,753	1,116	61	5	49,933	62,719	1,887	1,717	157	158	23	108
Ark.	244	16	7	-	6,995	7,319	124	87	7	4	1	16
La.	633	72	9	1	13,740	14,431	200	165	84	3	6	5
Okla.	219	-	3	2	5,164	6,337	180	177	39	5	9	25
Tex.	2,657	1,028	42	2	24,034	34,632	1,383	1,288	27	146	7	62
MOUNTAIN	1,140	372	29	5	11,186	11,578	2,744	688	206	60	90	16
Mont.	18	11	1	1	102	92	84	32	27	1	9	-
Idaho	31	22	-	-	107	150	86	73	-	2	4	2
Wyo.	4	6	2	-	54	88	12	15	51	-	1	5
Colo.	354	117	10	1	3,994	3,322	755	103	89	27	17	-
N. Mex.	97	53	4	1	852	920	280	194	30	8	2	2
Ariz.	333	99	6	1	3,928	4,320	1,037	159	27	15	31	-
Utah	109	19	3	1	299	295	394	20	28	7	3	6
Nev.	194	45	3	-	1,850	2,391	96	92	14	-	23	1
PACIFIC	8,138	3,301	102	4	40,184	50,456	5,789	3,193	1,321	225	83	202
Wash.	458	-	1	-	3,594	4,452	726	327	146	8	13	13
Oreg.	257	-	-	-	1,512	1,885	446	257	75	9	1	-
Calif.	7,289	3,192	94	3	33,996	42,645	4,372	2,574	895	197	67	188
Alaska	13	17	7	-	609	817	88	18	6	2	-	-
Hawaii	121	92	-	1	473	657	157	17	199	9	2	1
Guam	-	2	-	-	50	27	5	1	-	6	-	1
P.R.	1,478	156	2	-	209	509	41	376	163	17	1	-
V.I.	9	-	-	-	99	342	5	7	-	-	-	-
Amer. Samoa	-	-	-	-	48	59	1	1	-	-	-	-
C.N.M.I.	-	-	-	-	73	85	3	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly; last update October 31, 1992.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 28, 1992, and November 30, 1991 (48th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1992	1992	Cum. 1992	1992	Cum. 1992	Cum. 1991	Cum. 1992	1992	Cum. 1992	1992	Cum. 1992	Cum. 1991	1992	Cum. 1992	Cum. 1991
UNITED STATES	909	-	2,088	-	128	9,240	1,948	26	2,273	50	2,736	2,467	-	142	1,337
NEW ENGLAND	44	-	56	-	13	87	119	-	20	-	225	270	-	6	4
Maine	1	-	-	-	4	7	9	-	-	-	11	54	-	1	-
N.H.	3	-	15	-	-	-	6	-	6	-	54	18	-	-	1
Vt.	-	-	-	-	-	5	8	-	1	-	10	5	-	-	-
Mass.	23	-	16	-	5	40	46	-	3	-	103	167	-	-	2
R.I.	5	-	23	-	-	4	12	-	2	-	7	-	-	4	-
Conn.	12	-	2	-	4	31	38	-	8	-	40	26	-	1	1
MID. ATLANTIC	259	-	206	-	21	4,749	232	1	106	4	260	284	-	9	575
Upstate N.Y.	43	-	103	-	10	401	96	1	70	4	108	151	-	3	539
N.Y. City	140	-	42	-	8	1,850	24	-	10	-	20	27	-	-	2
N.J.	46	-	56	-	2	1,034	43	-	15	-	45	17	-	3	2
Pa.	30	-	5	-	1	1,464	69	-	71	-	87	69	-	3	32
E.N. CENTRAL	59	-	42	-	14	97	313	7	307	7	445	398	-	8	321
Ohio	12	-	-	-	6	11	74	5	115	-	115	94	-	-	283
Ind.	12	-	20	-	-	6	53	1	11	7	47	75	-	-	3
Ill.	17	-	9	-	4	28	85	-	91	-	33	71	-	8	9
Mich.	14	-	13	-	2	43	82	1	75	-	14	37	-	-	25
Wis.	4	-	-	-	2	9	19	-	15	-	236	121	-	-	1
W.N. CENTRAL	38	-	8	-	8	59	100	-	77	1	294	211	-	8	19
Minn.	16	-	7	-	5	27	18	-	24	-	104	84	-	-	6
Iowa	3	-	-	-	3	17	11	-	13	-	10	24	-	3	6
Mo.	11	-	-	-	-	1	33	-	31	1	105	74	-	1	5
N. Dak.	1	-	-	-	-	-	1	-	2	-	14	4	-	-	1
S. Dak.	2	-	-	-	-	-	1	-	-	-	14	5	-	-	-
Nebr.	1	U	-	U	-	1	19	U	5	U	15	9	U	-	-
Kans.	4	-	1	-	-	13	17	-	2	-	32	11	-	4	1
S. ATLANTIC	189	-	122	-	15	581	355	6	786	5	177	236	-	22	10
Del.	5	-	1	-	-	21	2	-	8	-	7	-	-	-	-
Md.	54	-	10	-	7	176	35	2	76	-	35	52	-	6	1
D.C.	13	-	1	-	1	-	3	-	7	-	1	1	-	1	1
Va.	42	-	11	-	5	30	55	-	52	-	15	24	-	-	-
W. Va.	2	-	-	-	-	-	17	-	27	-	9	9	-	1	-
N.C.	13	-	23	-	1	44	78	1	209	-	44	39	-	-	2
S.C.	1	-	29	-	-	13	22	-	51	-	10	15	-	7	-
Ga.	13	-	2	-	1	15	54	-	75	-	17	49	-	-	-
Fla.	46	-	45	-	-	282	89	3	281	5	39	47	-	7	6
E.S. CENTRAL	19	-	451	-	18	28	125	-	59	-	29	93	-	1	100
Ky.	1	-	450	-	2	23	40	-	-	-	1	-	-	-	-
Tenn.	11	-	-	-	-	3	36	-	15	-	8	38	-	1	100
Ala.	6	-	-	-	-	2	37	-	13	-	17	49	-	-	-
Miss.	1	-	1	-	16	-	12	-	31	-	3	6	-	-	-
W.S. CENTRAL	30	-	1,059	-	5	216	154	6	394	1	148	152	-	-	7
Ark.	3	-	-	-	-	5	18	-	9	-	18	14	-	-	1
La.	1	-	-	-	-	-	28	-	23	1	12	17	-	-	-
Okla.	5	-	12	-	-	-	19	-	19	-	48	49	-	-	-
Tex.	21	-	1,047	-	5	211	89	6	343	-	70	72	-	-	6
MOUNTAIN	31	-	25	-	7	1,256	92	-	142	13	391	322	-	9	38
Mont.	-	-	-	-	-	-	15	-	2	-	9	5	-	-	11
Idaho	1	-	-	-	-	451	8	-	4	1	39	27	-	1	-
Wyo.	-	-	1	-	-	3	3	-	1	-	-	3	-	-	-
Colo.	9	-	21	-	6	7	21	-	23	10	78	134	-	2	3
N. Mex.	5	-	1	-	1	98	10	N	N	1	102	45	-	-	4
Ariz.	9	-	2	-	-	454	19	-	77	-	121	69	-	2	2
Utah	4	-	-	-	-	224	4	-	23	1	40	37	-	2	11
Nev.	3	-	-	-	-	19	12	-	12	-	2	2	-	2	7
PACIFIC	240	-	99	-	27	2,167	458	6	322	19	767	521	-	79	263
Wash.	16	-	-	-	11	61	72	1	13	1	212	131	-	8	8
Oreg.	16	-	2	-	1	91	66	N	N	-	42	65	-	2	4
Calif.	194	-	55	-	3	1,979	304	5	280	14	449	249	-	46	239
Alaska	1	-	8	-	1	5	9	-	3	-	14	13	-	-	1
Hawaii	13	-	34	-	11	31	7	-	26	4	50	63	-	23	11
Guam	2	U	10	U	-	-	1	U	11	U	-	-	U	3	-
P.R.	-	29	463	-	-	94	3	-	1	-	11	58	-	-	1
V.I.	-	-	-	-	-	2	-	-	21	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	24	-	-	-	-	6	-	-	-	-
C.N.M.I.	-	U	1	U	1	-	-	U	-	U	2	-	U	-	-

*For measles only, imported cases include both out-of-state and international importations.

N: Not notifiable U: Unavailable [†] International [§] Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 28, 1992, and November 30, 1991 (48th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992
UNITED STATES	31,042	38,610	211	21,109	21,266	149	362	473	7,345
NEW ENGLAND	643	959	15	486	601	1	29	7	818
Maine	5	3	2	19	33	-	-	-	-
N.H.	74	12	6	17	5	-	1	-	9
Vt.	1	2	-	6	9	-	-	-	22
Mass.	303	459	5	270	331	1	19	3	36
R.I.	37	50	2	46	75	-	-	2	-
Conn.	223	433	-	128	148	-	9	2	751
MID. ATLANTIC	4,350	6,538	25	4,882	4,991	1	97	47	2,294
Upstate N.Y.	314	625	10	570	399	-	16	16	1,275
N.Y. City	2,349	3,333	-	2,883	3,145	-	41	6	18
N.J.	516	1,102	-	842	813	1	25	14	678
Pa.	1,171	1,478	15	587	634	-	15	11	323
E.N. CENTRAL	4,725	4,671	52	2,034	2,097	1	38	28	147
Ohio	779	617	16	294	350	-	7	16	13
Ind.	252	171	5	182	223	-	1	4	19
Ill.	2,168	2,181	10	1,052	1,059	1	25	2	39
Mich.	884	1,106	21	433	374	-	4	3	15
Wis.	642	596	-	73	91	-	1	3	61
W.N. CENTRAL	1,422	823	37	482	470	53	6	34	987
Minn.	88	64	7	135	93	-	2	-	155
Iowa	49	65	7	39	55	-	1	3	166
Mo.	1,122	510	8	211	211	37	2	23	32
N. Dak.	1	1	3	7	10	-	-	-	141
S. Dak.	-	1	-	21	31	11	-	1	122
Nebr.	1	17	4	20	18	2	1	2	12
Kans.	161	165	8	49	52	3	-	5	359
S. ATLANTIC	8,261	11,265	22	3,937	4,035	5	35	169	1,693
Del.	189	155	3	47	33	-	-	14	199
Md.	573	913	2	363	411	1	7	17	511
D.C.	364	660	-	103	172	-	1	1	17
Va.	674	843	3	312	289	2	5	22	338
W. Va.	19	26	1	83	65	-	1	5	49
N.C.	2,202	1,881	3	521	521	1	-	61	45
S.C.	1,122	1,430	1	368	388	-	2	8	156
Ga.	1,612	2,755	5	809	790	1	2	38	337
Fla.	1,506	2,602	4	1,331	1,366	-	17	3	43
E.S. CENTRAL	3,937	4,284	3	1,356	1,376	9	5	62	181
Ky.	161	104	-	358	309	2	1	6	61
Tenn.	1,120	1,370	3	392	439	7	-	53	41
Ala.	1,315	1,611	-	369	350	-	1	3	78
Miss.	1,341	1,199	-	237	278	-	3	-	1
W.S. CENTRAL	5,814	7,034	5	2,598	2,514	44	17	109	659
Ark.	812	668	1	206	220	30	1	23	42
La.	2,449	2,600	-	198	203	2	1	1	8
Okla.	415	195	3	150	165	12	-	84	284
Tex.	2,138	3,571	1	2,044	1,926	-	15	1	325
MOUNTAIN	313	535	18	510	559	28	6	11	237
Mont.	7	6	1	-	6	12	-	3	24
Idaho	1	4	1	22	12	-	1	1	7
Wyo.	7	9	1	-	5	1	-	4	81
Colo.	55	82	6	52	71	5	2	-	26
N. Mex.	39	30	1	72	63	5	1	1	9
Ariz.	156	338	4	237	288	-	1	-	67
Utah	7	6	4	61	51	2	-	1	6
Nev.	41	60	-	66	63	3	1	1	17
PACIFIC	1,577	2,501	34	4,824	4,623	7	129	6	329
Wash.	74	178	3	287	279	2	8	-	-
Oreg.	47	81	2	119	114	-	2	3	2
Calif.	1,443	2,231	29	4,128	3,981	2	111	3	314
Alaska	5	4	-	45	59	3	-	-	13
Hawaii	8	7	-	245	190	-	8	-	-
Guam	3	1	-	58	8	-	3	-	-
P.R.	308	408	-	200	211	-	1	-	42
V.I.	65	95	-	3	3	-	-	-	-
Amer. Samoa	-	-	-	-	3	-	1	-	-
C.N.M.I.	6	6	-	52	22	-	1	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending November 28, 1992 (48th Week)

Reporting Area	All Causes, By Age (Years)						P&I[†] Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	511	380	80	38	9	4	39
Boston, Mass.	134	86	26	16	2	2	15
Bridgeport, Conn.	46	36	5	2	3	-	3
Cambridge, Mass.	25	18	4	3	-	-	1
Fall River, Mass.	24	22	2	-	-	-	-
Hartford, Conn.	58	37	15	3	2	1	2
Lowell, Mass.	22	20	2	-	-	-	-
Lynn, Mass.	16	15	1	-	-	-	-
New Bedford, Mass.	14	11	1	2	-	-	1
New Haven, Conn.	37	28	6	1	1	1	1
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	3	3	-	-	-	-	1
Springfield, Mass.	46	31	11	3	1	-	5
Waterbury, Conn.	26	24	-	2	-	-	2
Worcester, Mass.	60	49	7	4	-	-	8
MID. ATLANTIC	2,284	1,485	453	232	59	54	100
Albany, N.Y.	55	39	9	3	3	1	5
Allentown, Pa.	18	16	1	1	-	-	-
Buffalo, N.Y.	98	60	23	5	7	3	3
Camden, N.J.	20	12	5	1	1	1	-
Elizabeth, N.J.	24	17	6	1	-	-	-
Erie, Pa.§	34	27	4	2	-	1	5
Jersey City, N.J.	32	22	5	3	-	2	3
New York City, N.Y.	1,211	740	270	150	30	21	42
Newark, N.J.	52	19	13	14	5	1	4
Paterson, N.J.	22	11	5	3	1	2	1
Philadelphia, Pa.	346	235	58	29	8	16	8
Pittsburgh, Pa.§	56	43	9	2	1	1	2
Reading, Pa.	24	18	3	3	-	-	4
Rochester, N.Y.	82	61	13	5	-	3	9
Schenectady, N.Y.	36	31	4	1	-	-	2
Scranton, Pa.§	26	21	2	1	-	2	3
Syracuse, N.Y.	113	87	18	5	3	-	6
Trenton, N.J.	19	12	4	2	-	1	3
Utica, N.Y.	16	14	1	1	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,754	1,090	340	187	89	48	80
Akron, Ohio	43	34	6	-	1	2	-
Canton, Ohio	20	18	2	-	-	-	4
Chicago, Ill.	487	190	112	107	57	21	9
Cincinnati, Ohio	104	77	18	5	3	1	9
Cleveland, Ohio	139	93	28	8	7	3	2
Columbus, Ohio	128	81	26	15	3	3	6
Dayton, Ohio	95	65	24	4	-	2	5
Detroit, Mich.	126	78	26	14	5	3	6
Evansville, Ind.	30	24	5	1	-	-	3
Fort Wayne, Ind.	49	38	5	2	4	-	6
Gary, Ind.	8	4	2	-	2	-	-
Grand Rapids, Mich.	49	42	3	1	1	2	6
Indianapolis, Ind.	160	107	33	13	3	4	6
Madison, Wis.	25	18	5	1	-	1	2
Milwaukee, Wis.	77	65	8	4	-	-	6
Peoria, Ill.	21	17	2	2	-	-	1
Rockford, Ill.	29	22	4	2	-	1	2
South Bend, Ind.	37	23	8	3	1	2	3
Toledo, Ohio	79	57	17	4	-	1	3
Youngstown, Ohio	48	37	6	1	2	2	1
W.N. CENTRAL	689	498	100	48	25	18	40
Des Moines, Iowa	53	41	8	-	1	3	5
Duluth, Minn.	18	11	3	2	2	-	3
Kansas City, Kans.	25	13	4	4	3	1	1
Kansas City, Mo.	113	80	16	10	5	2	3
Lincoln, Nebr.	25	16	6	3	-	-	1
Minneapolis, Minn.	206	159	26	8	7	6	12
Omaha, Nebr.	74	53	15	4	-	2	2
St. Louis, Mo.	82	60	7	9	3	3	9
St. Paul, Minn.	41	29	7	1	4	-	2
Wichita, Kans.	52	36	8	7	-	1	2
S. ATLANTIC	1,062	642	214	138	34	34	60
Atlanta, Ga.	152	93	32	21	3	3	8
Baltimore, Md.	191	112	43	22	6	8	21
Charlotte, N.C.	85	62	13	7	2	1	3
Jacksonville, Fla.	60	37	12	9	1	1	4
Miami, Fla.	93	50	18	20	5	-	-
Norfolk, Va.	53	34	9	4	2	4	4
Richmond, Va.	49	30	7	4	5	3	1
Savannah, Ga.	41	29	7	3	2	-	4
St. Petersburg, Fla.	59	46	8	4	-	1	-
Tampa, Fla.	148	83	33	22	3	7	13
Washington, D.C.	115	51	31	22	5	6	2
Wilmington, Del.	16	15	1	-	-	-	-
E.S. CENTRAL	685	442	126	62	26	29	39
Birmingham, Ala.	141	88	29	10	5	9	6
Chattanooga, Tenn.	35	26	5	3	1	-	3
Knoxville, Tenn.	71	47	17	7	-	-	7
Lexington, Ky.	32	23	4	2	2	1	1
Memphis, Tenn.	225	149	32	24	11	9	10
Mobile, Ala.	62	41	12	3	5	1	3
Montgomery, Ala.	30	15	7	5	1	2	1
Nashville, Tenn.	89	53	20	8	1	7	8
W.S. CENTRAL	977	617	181	121	32	25	66
Austin, Tex.	49	29	10	7	-	3	3
Baton Rouge, La.	43	30	8	1	-	4	2
Corpus Christi, Tex.	32	23	4	2	3	-	-
Dallas, Tex.	128	85	25	11	5	2	10
El Paso, Tex.	51	32	7	9	2	1	4
Ft. Worth, Tex.	83	59	13	7	-	4	2
Houston, Tex.	241	118	53	51	11	7	23
Little Rock, Ark.	36	26	5	5	-	-	1
New Orleans, La.	62	29	16	9	6	2	-
San Antonio, Tex.	125	87	23	12	2	1	15
Shreveport, La.	60	47	7	3	2	1	3
Tulsa, Okla.	67	52	10	4	1	-	5
MOUNTAIN	675	442	129	63	28	13	43
Albuquerque, N.M.	59	40	6	7	5	1	2
Colo. Springs, Colo.	46	34	8	3	1	-	4
Denver, Colo.	96	59	19	10	5	3	6
Las Vegas, Nev.	90	57	20	9	4	-	3
Ogden, Utah	17	14	1	2	-	-	1
Phoenix, Ariz.	156	90	35	20	4	7	14
Pueblo, Colo.	20	17	3	-	-	-	-
Salt Lake City, Utah	85	54	18	9	3	1	5
Tucson, Ariz.	108	77	19	3	6	1	8
PACIFIC	1,317	877	240	128	42	24	66
Berkeley, Calif.	17	13	1	2	-	1	4
Fresno, Calif.	27	18	3	3	1	2	1
Glendale, Calif.	14	10	3	-	1	-	-
Honolulu, Hawaii	68	49	11	4	1	3	6
Long Beach, Calif.	67	50	9	5	3	-	4
Los Angeles, Calif.	296	188	49	32	16	5	13
Pasadena, Calif.	22	15	4	1	1	1	1
Portland, Oreg.	140	102	23	8	1	6	5
Sacramento, Calif.	87	54	17	11	3	2	9
San Diego, Calif.	101	74	16	8	2	1	4
San Francisco, Calif.	128	71	25	32	-	-	-
San Jose, Calif.	136	83	33	9	9	2	8
Santa Cruz, Calif.	19	16	3	-	-	-	3
Seattle, Wash.	92	66	16	7	2	1	1
Spokane, Wash.	48	30	13	3	2	-	2
Tacoma, Wash.	55	38	14	3	-	-	5
TOTAL	9,954¶	6,473	1,863	1,017	344	249	535

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

U: Unavailable.

Heterosexual Transmission of HIV — Continued

The proportion of AIDS cases attributed to IDU declined from 70% before 1988 to 59% in 1991, and the proportion of cases attributed to heterosexual transmission increased from 5% to 18%. Of the 798 cases of AIDS attributed to heterosexual transmission since 1981, 546 (68%) occurred among persons who reported heterosexual contact with an injecting-drug user.

Heterosexual Transmission

Overall, 553 (69%) AIDS cases attributed to heterosexual transmission were among women. Before 1988, the proportion of cases among women attributed to IDU (61%) was greater than that attributed to heterosexual transmission (28%). In 1991, however, 58% of AIDS cases among women were attributed to heterosexual transmission, and 39%, to IDU. In comparison, in the United States, heterosexual transmission accounted for 37% and IDU, for 48%. Among the 1268 women with AIDS in Puerto Rico, heterosexual contact with an injecting-drug user accounted for 423 (76%) of 553 cases attributed to heterosexual transmission. In addition, 105 (19%) cases among women were attributed to heterosexual contact with a person known to have been infected with HIV but who had no specified mode of HIV exposure.

Heterosexual transmission was less frequent among men with AIDS and accounted for 81 (8%) of 993 cases in 1991, compared with <1% before 1988. In 1991, heterosexual HIV transmission ranked far behind IDU (64% of all cases among men) and male-male sexual transmission (24% of all cases among men). Among all men with AIDS aged <40 years, approximately 2% were infected through heterosexual contact, compared with 9% among men aged ≥40 years. The proportion of cases attributed to heterosexual transmission increased among men aged ≥40 years from 2% before 1988 to 16% in 1991 and among men aged <40 years from 0.4% to 4%.

Multiple Modes of Transmission

A substantial proportion of injecting-drug users reported high-risk sexual behavior: since 1981, 16% of all men with AIDS who reported IDU also reported having had sex with men. Among all persons with AIDS who reported IDU, 42% of women and 27% of heterosexual men also reported having had sex with another injecting-drug user or sex with someone known to have HIV infection or AIDS.

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Editorial Note: Because of a high rate of AIDS and a substantial proportion of AIDS cases attributed to heterosexual contact, the epidemiologic profile of AIDS in Puerto Rico appears to be similar to that in Caribbean countries (*5,6*). However, the marked prevalence of IDU among persons with AIDS in Puerto Rico distinguishes it from other areas of the Caribbean.

In states with high proportions of IDU cases, such as New Jersey and Florida, the proportion of cases attributed to heterosexual transmission is as high as 16%. In some countries with high rates of IDU associated with HIV infection, such as Italy and Spain, increases in heterosexual transmission have also occurred (*7*).

The findings in this report indicate that, in Puerto Rico, the proportion of cases attributed to heterosexual transmission is increasing among men. These findings are consistent with an evolving pattern of the HIV/AIDS epidemic: the epidemic was in-

Heterosexual Transmission of HIV — Continued

itially characterized by transmission associated primarily with IDU and male-male sex. Transmission was subsequently propagated through heterosexual relations, and more women became infected. Finally, a substantial proportion of men with AIDS are becoming infected through sex with infected women.

Many persons with AIDS have multiple HIV-exposure risks, and it is often not possible to ascertain the specific mode of viral transmission. Consequently, more cases may be due to heterosexual transmission than are documented. Conversely, overestimation of the rate of heterosexual transmission among men may result from misclassification of men who do not acknowledge having had sex with men or IDU (*8*).

The findings in this report underscore that efforts to prevent the spread of HIV infection in Puerto Rico should target injecting-drug users and their sex partners. Using combined local and federal funds to achieve this goal, the Puerto Rico Department of Health has implemented outreach programs in areas with a high prevalence of drug use. These programs have been instituted throughout the commonwealth and frequently use resources and personnel from community-based organizations to educate persons at risk regarding prevention of HIV transmission and risk reduction. As part of these outreach programs, former addicts now serve as peer educators to teach methods for safer sexual practice, refer for treatment, discourage needle sharing, and teach needle hygiene.

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Effectiveness in Disease and Injury Prevention

Cardiovascular Disease Control Efforts Among Primary-Care Physicians — Missouri, 1990

Nearly half (43%) of all deaths in the United States each year are related to cardiovascular diseases (CVD), including coronary heart disease and cerebrovascular disease (*1*). CVD is linked to certain risk factors and behaviors, including high blood pressure, elevated total serum cholesterol, cigarette smoking, and physical inactivity (*2*). Because approximately 70% of the population has at least one contact with a physician each year (*3*), primary-care physicians are central to health promotion and

CVD Control — Continued

disease-prevention efforts and early detection of CVD. In May and August 1990, the Missouri Department of Health (MDH) conducted a survey of practicing Missouri physicians to characterize their efforts to identify and control CVD risk factors among their patients.

MDH mailed a questionnaire to a random sample of 400 physicians drawn from 3345 family practitioners, internal medicine specialists, and obstetricians/gynecologists; 295 (74%) responded. Questions included demographic information, physician knowledge of CVD risk factors, current activity levels in CVD detection and prevention, possible barriers or constraints in CVD control, and preferred types of patient-education materials and counseling. Physicians were also asked about their own smoking status, serum cholesterol and blood pressure levels, and physical-activity patterns. Questionnaire items were standardized using previous physician surveys (i.e., statewide surveys in cancer control [*4*] and National Heart, Lung, and Blood Institute instruments [*5*]).

When asked to rate 10 diseases according to their impact (i.e., morbidity and mortality) on the population, physicians considered diseases of the heart and blood vessels (79%), cancer (56%), and diabetes (37%) to be of very high importance.

Respondents were also asked to indicate the level of effect (i.e., large, moderate, or little effect) of eight risk factors (i.e., cigarette smoking, hypertension, diabetes, high-fat diet, overweight, elevated blood cholesterol, sedentary lifestyle, and Type A behavior/stress) on CVD risk (Table 1). Of the eight risk factors, 89% and 19% of physicians rated cigarette smoking and Type A behavior/stress, respectively, as risk factors with a large effect on CVD. Sedentary lifestyle ranked seventh among the eight CVD risk factors, despite 82% of physicians indicating that physical activity substantially lowers blood pressure among persons who are hypertensive.

The most frequently performed CVD-prevention activity was patient blood pressure screening (Table 2): 81% of physicians reported always measuring blood pressure on adult patients at each visit. The second and third most often performed prevention activities were physical examinations and tobacco education, respectively. Physicians' beliefs about the contribution of tobacco to CVD incidence were correlated with the prevalence of tobacco-cessation education efforts or counseling and taking smoking histories for patients at each visit. Sixty-three percent reported always taking patients' smoking histories.

Nearly all (98%) physicians reported knowing their own "usual" blood pressure reading. Nearly 42% of physicians reported a predominantly sedentary lifestyle (defined as not participating in regular physical activity for at least 20 minutes 3 or more days a week). Few (8%) physicians were current smokers, and 34% were former smokers.

Respondents reported that more time was required than was available in their offices to conduct adequate tobacco-cessation counseling (36%), dietary counseling (31%), and physical-activity counseling (15%). In addition, 22% of respondents agreed strongly with the statement "The lack of financial reimbursement for tobacco-cessation, dietary, and physical-activity counseling reduces the likelihood of conducting these activities in the primary-care office"; 29% of the physicians agreed "somewhat" with the statement.

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CVD Control — Continued

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Editorial Note: The findings in this report suggest that primary-care physicians in Missouri are generally aware of the importance of CVD risk factors; however, some physicians may miss opportunities for CVD-prevention and early detection activities, such as conducting nutritional and physical-activity education or counseling. Even though a recent survey of primary-care physicians in another state (North Carolina) indicated that most (96%) agreed that primary-care physicians should assist asymptomatic patients in reducing behavioral risk factors (*6*), the MDH survey identified important barriers to CVD-prevention activities, including lack of time for counseling and inadequate reimbursement.

Primary-care physicians have cost-effectively provided prevention activities, such as smoking-cessation counseling (*7*). This survey did not assess the effectiveness and cost-effectiveness of primary-care physicians in providing CVD-prevention activities; however, if primary-care physicians are to play a role in prevention activities, barriers to their involvement must be addressed. For example, increased emphasis on prevention education in medical schools, residency programs, and continuing medical-education training may enhance their skills in identifying behavioral risk factors and conducting counseling. In addition, efficacious and time-efficient interventions targeting CVD-risk behaviors must be developed.

National health objectives for the year 2000 target coronary heart disease and stroke as priorities for preventive services (*2*). Specific objectives include reducing coronary heart disease deaths to less than 100 per 100,000 persons* and reducing deaths from strokes to less than 20 per 100,000 persons† (objectives 15.1 and 15.2, respectively). Preventive services targeted include increasing physician assessment and counseling for CVD risk factors (e.g., physical inactivity, cigarette smoking, and nutrition) and increasing the proportion of adults who have their blood pressure and blood cholesterol checked (objectives 15.13 and 15.14, respectively). However, to meet

*Age-adjusted baseline: 135 per 100,000 population in 1987.
†Age-adjusted baseline: 30.3 per 100,000 population in 1987.

TABLE 1. Physicians' assessment of the effect of cardiovascular disease (CVD) risk factors for developing CVD — Missouri, 1990

			Knowledge score†	
CVD risk factor	No. physicians	Large effect*	Level of effect	(95% CI§)
Cigarette smoking	292	89%	1.9	(1.8–2.0)
Hypertension	290	80%	1.8	(1.7–1.9)
Diabetes	291	76%	1.7	(1.6–1.8)
High-fat diet	290	58%	1.6	(1.5–1.7)
Overweight	290	53%	1.5	(1.4–1.6)
Elevated blood cholesterol	288	50%	1.5	(1.4–1.6)
Sedentary lifestyle	292	26%	1.1	(1.0–1.2)

*Percentage of physicians ranking as "large effect" the effects of various CVD risk factors for developing CVD.
†The knowledge score is a mean value based on the following levels of assessment of the effects of various risk factors: little or no effect=0; moderate effect=1; large effect=2.
§Confidence interval.

CVD Control — Continued

TABLE 2. Physicians' self-reported level of activity in various preventive activities — Missouri, 1990

Activity	No.	Activity score*	(95% CI†)
Blood pressure screening	290	3.2	(3.1–3.3)
Physical examinations	288	3.2	(3.1–3.3)
Tobacco-cessation education or counseling	290	3.1	(3.0–3.2)
Cancer screening	289	2.9	(2.8–3.0)
Diabetes screening	288	2.8	(2.7–2.9)
Serum lipids screening	286	2.8	(2.7–2.9)
Physical activity education or counseling	288	2.5	(2.4–2.6)
Nutrition education or counseling	288	2.5	(2.4–2.6)
Immunizations	288	2.2	(2.1–2.3)
Depression and anxiety counseling	287	2.1	(2.0–2.2)

*The activity score is a mean value based on the following levels of assessment of procedures: no activity=0; low activity=1; medium activity=2; high activity=3; very high activity=4.
†Confidence interval.

these objectives, primary-care physicians must continue to play a role in identifying patients with risk factors, counseling patients on changing these behaviors, and referring patients to appropriate health-education and counseling sources, such as hospital or community cardiovascular health programs (*8*). In addition, public health agencies and other community organizations must coordinate their efforts more closely with primary-care physicians to provide and reinforce patient CVD health education messages (*8*).

The MDH is using these survey findings in programs such as the American Stop Smoking Intervention Study and the Missouri Diabetes Control Program to reduce missed opportunities for health-promotion activities during patient contacts with primary-care physicians.

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Quarterly Table Reporting Alcohol Involvement in Fatal Motor-Vehicle Crashes

The following table reports alcohol involvement in fatal motor-vehicle crashes in the United States for October–December 1991. This table, published quarterly in *MMWR*, focuses attention on the impact of alcohol use on highway safety.

A fatal crash is considered alcohol-related by the National Highway Traffic Safety Administration (NHTSA) if either a driver or nonoccupant (e.g., pedestrian) had a blood alcohol concentration (BAC) of ≥0.01 g/dL in a police-reported traffic crash. Those with a BAC ≥0.10 g/dL (the legal level of intoxication in most states) are considered intoxicated. Because BACs are not available for all persons in fatal crashes, NHTSA estimates the number of alcohol-related traffic fatalities based on a discriminant analysis of information from all cases for which driver or nonoccupant BAC data are available. Seasonal trends may be associated with these data.

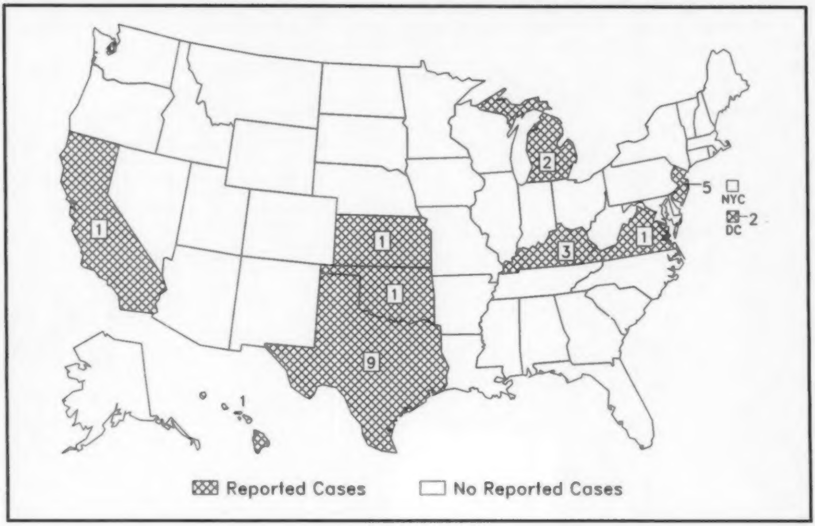
Estimated number and percentage of total traffic fatalities* and drivers involved in fatal crashes, by age and blood alcohol concentration (BAC) level — United States, October–December, 1991

		Fatalities, by BAC†					
		BAC=0.00		0.01%≤BAC≤0.09%		BAC≥0.10%	
Age group (yrs)	No. fatalities§	No.	(%)	No.	(%)	No.	(%)
0–14	622	471	(75.8)	52	(8.4)	98	(15.8)
15–20	1,569	846	(53.9)	229	(14.6)	495	(31.5)
21–24	1,175	424	(36.1)	133	(11.4)	618	(52.6)
25–34	2,030	707	(34.8)	186	(9.2)	1,137	(56.0)
35–64	3,179	1,621	(51.0)	260	(8.2)	1,298	(40.8)
≥65	1,798	1,487	(82.7)	94	(5.2)	217	(12.1)
Total	**10,373**	**5,555**	**(53.6)**	**955**	**(9.2)**	**3,863**	**(37.2)**
		Drivers,¶ by BAC**					
		BAC=0.00		0.01%≤BAC≤0.09%		BAC≥0.10%	
Age group (yrs)	No. drivers§	No.	(%)	No.	(%)	No.	(%)
0–14††	18	15	(83.1)	1	(5.7)	2	(11.2)
15–20	1,945	1,388	(71.4)	187	(9.6)	370	(19.0)
21–24	1,713	1,013	(59.2)	162	(9.5)	537	(31.4)
25–34	3,440	2,132	(62.0)	256	(7.5)	1,051	(30.6)
35–64	4,926	3,720	(75.5)	260	(5.3)	946	(19.2)
≥65	1,476	1,356	(91.8)	37	(2.5)	84	(5.7)
Total	**13,518**	**9,625**	**(71.2)**	**903**	**(6.7)**	**2,990**	**(22.1)**

*Fatalities include all occupants and nonoccupants who died within 30 days of a motor-vehicle crash on a public roadway.
†BAC distributions are estimates for drivers and nonoccupants involved in fatal crashes. Numbers of fatalities are rounded to the nearest whole number.
§Includes only those for whom age is known.
¶Driver may or may not have been killed.
**BAC distributions are estimates for drivers involved in fatal crashes. Numbers of drivers are rounded to the nearest whole number.
††Although usually too young to legally drive, persons in this age group are included for completeness of the data set.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration.

Reported cases of measles, by state — United States, weeks 45–48, 1992



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